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(54) Title: METHODS OF USING GELSOLIN TO TREAT OR PREVENT BACTERIAL SEPSIS

(57) Abstract: Provided are methods of using gelsolin and active fragments thereof to neutralize, treat or prevent the pathogenic effects of lipopolysaccharide (LPS) endotoxins released from gram-negative bacteria, including massive activation of inflammatory response in a patient and the resulting lethal septic shock. The provided gelsolin binds LPS from various bacteria with high affinity, decreasing circulating LPS and neutralizes its deleterious biological effects. Consequently, the provided gelsolin replacement therapy offers a method for the prevention of LPS-induced mortality in the patient.